

Claims

1. An attachment device for an auxiliary wheel, releasably attachable to a wheel of a vehicle, comprising a coupling part, provided on the auxiliary wheel, with coupling members held therein, and a holding part, provided on the wheel of the vehicle, with corresponding receiving parts for the coupling members, which coupling members are engaged and held in the receiving parts in the state of the auxiliary wheel being attached to the wheel of the vehicle, in which state the auxiliary wheel is aligned coaxially to the wheel of the vehicle, wherein
 - 10 the coupling members are designed as bolts, each of which is:
 - aligned substantially parallel to the wheel axle of the auxiliary wheel,
 - connected to the wheel rim of the auxiliary wheel, and
 - has a head-shaped swelling on the end region remote from the wheel rim,
 - 15 and wherein the receiving parts disposed on the holding part are slot-shaped recesses having:
 - an insertion zone into which zone the head-shaped swellings of the respective bolts are insertable through displacement of the auxiliary wheel in wheel axle direction, and
 - a retaining zone, with protruding pieces, into which zone the head-shaped swellings of the bolts
 - 20 • are pushable through movement of the auxiliary wheel in the plane running substantially perpendicular to the wheel axle,

- are supportable on the protruding pieces and
- are maintainable in this position through locking means.

2. The attachment device according to claim 1, wherein the bolts are
5 fixed to a plate which is connected to the wheel rim of the auxiliary wheel via a spacer sleeve, and the slot-shaped recesses are made in a further plate which is connected to the wheel rim of the wheel of the vehicle via spacers, and the plate and the further plate abut one another in the state of the auxiliary wheel being attached to the wheel of the vehicle.

10 3. The attachment device according to claim 1, wherein the protruding pieces, holding the head-shaped swelling of the bolts, of the slot-shaped recesses each have a protruding piece thickness that increases from the respective insertion zone toward the end remote from the insertion zone, and the support surfaces of the protruding pieces for the head-shaped swelling
15 of the bolts increase from the insertion zone.

4. The attachment device according to claim 1, wherein the slot-shaped recesses co-operating with the respective bolts are disposed circularly and centrosymmetrically about the wheel axle center.

5. The attachment device according to claim 4, wherein the auxiliary
20 wheel is provided with guide and centering means which co-operate with corresponding guide surfaces provided on the wheel of the vehicle and by means of which the auxiliary wheel is led in axial direction and is able to be centered during the displacement, for attaching to the wheel of the vehicle.

6. The attachment device according to claim 1, wherein the shank of
25 the bolt and the head-shaped swelling of the bolt are cylindrical, the face between head-shaped swelling and bolt shank is conically inclined, and the support surfaces of the protruding pieces are correspondingly beveled.

7. The attachment device according to claim 1, wherein the locking means each comprise an axially displaceable locking bolt which is borne in a guide bush, which guide bush is disposed on the plate provided on the auxiliary wheel in such a way that in the state of the auxiliary wheel being attached to
5 the wheel of the vehicle the locking bolt is insertable with the one end region in the corresponding insertion zone of the slot-shaped recess, and makes impossible a movement of the auxiliary wheel with respect to the wheel of the vehicle in this locked state.
8. The attachment device according to claim 7, wherein the end
10 region of the locking bolt insertable into the insertion zone is of conical design, and the insertion zone of the slot-shaped recess is correspondingly conically shaped.
9. The attachment device according to claim 7, wherein the other end region of the locking bolt protrudes beyond the guide bush, and a cross
15 bolt is fixed on this protruding area, by means of which the locking bolt is rotatable, and wherein this cross bolt is supported on cheeks provided on the upper edge of the guide bush, which cheeks have an incline in the rotational direction of the locking bolt.
10. The attachment device according to claim 7, wherein disposed in
20 the guide bush is a spring element by means of which the locking bolt is pushable in the direction of the locked state.